

IN THE CLAIMS:

Please amend the claims as follows. This listing of the claims will replace all prior versions, and listings, of claims in the application:

1-6. (canceled)

7. (Currently Amended) A linear drive unit comprising:

a yoke body having an exciter winding providing a magnetic field;

a magnetic armature part which is set in linear ~~oscillating~~ motion to symmetrically oscillate about a center position in an axial direction by the magnetic field of the winding, the center position being the position the armature part adopts when oscillating between its maximum lateral deflection positions, wherein a center of the armature is aligned with a center of the yoke body in the center position; and

a spring having a fixed end clamped in a fixed manner at a clamped position with respect to the yoke body and an oscillating end coupled to the armature part at a point of application and acting on the armature part in the direction of motion;

wherein in the center position of the armature part, the point of application of the spring on the armature part being displaced axially by a predetermined distance in relation to the clamped position, and

wherein the spring is configured as a leaf spring and when the armature part is at the center position the spring is pre-tensioned to apply a force in ~~transverse to~~ the direction of movement of the armature part.

8. (Canceled).

9. (Previously Presented) The drive unit according to claim 7, further comprising a plurality of springs disposed on each side of the center position.

10. (Previously Presented) The drive unit according to claim 7, wherein the armature part is connected to a plunger of a compressor, the axial displacement of the point of application of the spring on the armature part being provided in the direction away from the compressor.

11. (Previously Presented) The drive unit according to claim 7, wherein the spring has a spring constant selected such that the characteristic frequency of the drive unit in cooperation with the total oscillating mass is lower than the frequency of the driving force.

12. (Canceled).

13. (Currently Amended) A linear drive unit comprising:

a yoke body having an exciter winding providing a magnetic field;

a magnetic armature part configured to be set in linear oscillating motion about a center position in an axial direction by the magnetic field of the winding, the center position being the position the center of the armature part adopts when aligned with the center of the yoke body in which the armature may symmetrically oscillate relative to the yoke body between its maximum lateral deflection positions; and

a spring fixed with respect to the yoke body at a clamped position and an oscillating end coupled to the armature part at a point of application and acting on the armature part in a direction of motion;

wherein when the armature part is in the center position, the point of application of the spring on the armature part is axially displaced a predetermined distance from the clamped position of the spring, such that the spring is pre-tensioned to apply a force in the axial direction~~by the axial displacement~~.

14. (Previously Presented) The drive unit according to claim 13, wherein the spring is configured as to be spring tensioned transverse to the direction of movement of the armature part.

15. (Previously Presented) The drive unit according to claim 14, wherein the spring comprises a leaf spring, a coil spring or a helical spring.
16. (Previously Presented) The drive unit according to claim 13, further comprising a plurality of springs disposed on each side of the center position.
17. (Previously Presented) A compressor comprising a pump, a plunger and the drive unit of claim 13, wherein the axial displacement of the point of application of the spring on the armature part is provided in the direction away from the compressor.
18. (Previously Presented) The drive unit according to claim 13, wherein the spring has a spring constant selected such that the characteristic frequency of the drive unit in cooperation with the total oscillating mass is lower than the frequency of the driving force.
19. (Previously Presented) The drive unit according to claim 13, wherein the armature part includes two magnets arranged symmetrically on each side of the yoke body in the center position.
20. (Currently Amended) A linear drive unit comprising:
a yoke body having an exciter winding providing a magnetic field;
a magnetic armature part which is set in linear oscillating motion about a center position in an axial direction by the magnetic field of the winding, the center position being the position where the center of the armature is aligned with the center of the yoke body and/or windings thereof, the center position being an equidistant point between two maximum lateral deflections of the magnetic armature when oscillating; and
a spring having a fixed end clamped in a fixed manner at a clamped position with respect to the yoke body and an oscillating end coupled to the armature part at a point of application and acting on the armature part in the direction of motion;

wherein when the armature part is at the center position, the point of application of the spring on the armature part is displaced axially by a predetermined distance in relation to the clamped position of the spring, and

wherein the spring is configured to be pre-tensioned to apply a force in an axial
~~transverse to the direction of~~ direction along movement of the armature part when the armature part is at the center position.

21. (Previously Presented) The drive unit according to claim 20, wherein the spring comprises a leaf spring, a coil spring or a helical spring.
22. (Previously Presented) The drive unit according to claim 20, further comprising a plurality of springs disposed on each side of the center position.
23. (Previously Presented) A compressor comprising a pump, a plunger and the drive unit of claim 20, wherein the axial displacement of the point of application of the spring on the armature part is provided in the direction away from the compressor.
24. (Previously Presented) The drive unit according to claim 20, wherein the spring has a spring constant selected such that the characteristic frequency of the drive unit in cooperation with the total oscillating mass is lower than the frequency of the driving force.
25. (Previously Presented) The drive unit according to claim 20, wherein the armature part includes two magnets arranged symmetrically on each side of the yoke body in the center position.
26. (Previously Presented) The drive unit according to claim 7, wherein the armature part includes two magnets arranged symmetrically on each side of the yoke body in the center position.